

## SURINAMIA, A NEW AMPULLARIID FROM DUTCH GUIANA

BY WILLIAM J. CLENCH

SURINAMIA, new subgenus of ASOLENE Orb.

Differs from *Asolene* proper by possessing strong spiral sculpture, being imperforate and having a very dark mahogany color, a color materially different from the usual greenish or greenish-yellow of most Ampullariidae. From the subgenus *Pomella* it differs in its color, in its type of sculpture, and lacks the peculiar neritoid aperture of this latter subgenus. *Pomella* has a rough and somewhat malleated surface, not however, similar to the usual smooth malleations in *Pomacea*, but slightly elongated and oblique sculptural depressions. Genotype, *Asolene* (*Surinamia*) *fairchildi*.

ASOLENE (SURINAMIA) FAIRCHILD, species nov. Plate 7, figs. 1, 2.

*Description*: Shell rounded, solid, imperforate. Color more or less uniformly mahogany brown. No trace of banding. Interior of aperture brown, orange-brown to grayish. Color usually more intense just within the lip, lighter just below, and then much darker well within the aperture. Columella light brownish orange. Whorls convex, probably 3 or 4 (all specimens corroded). Spire depressed. Palatal lip simple. Parietal wall rather heavily calloused and with a slight additional thickening at the insertion of the lip on the body whorl. Aperture rounded-ovate, entire palatal area somewhat flaring. Face of the aperture cast at an angle of  $70^\circ$  from the horizontal line. Outer edge of lip somewhat sigmoid in a profile view. Columella heavy, arched smoothly into the parietal area. Sculpture of numerous, generally fine spiral incised lines, cut at right angles to the finer, more irregular and less sharply ridged growth lines. Under an eight power lens (Pl. 7, fig. 2) there appears a series of very fine, spiral wrinkles, most numerous on the superior portion of the body whorl. Suture well depressed but not indented. Operculum unknown.

*Measurements*: Holotype, height 49, with 44.5, aperture  $41 \times 28.5$  mm. Average measurements of five specimens: height 48.9, width 46, aperture  $41.2 \times 26.8$  mm. (loss of 5-7 mm. in height through corrosion of spires).

*Holotype*: M.C.Z. No. 80515. On rocks in the cataract of the Surinam River below Kedjo, Dutch Guiana (100 miles up river from Paramaribo), David Fairchild collector, March 3, 1932. Additional paratypes, M.C.Z. No. 80516; Acad. Nat. Sci. Phila., and the University of Michigan.

*Remarks*: *Surinamia* is provisionally placed in the genus *Asolene* until more definite knowledge relative to its soft parts is known. *Asolene* is without a breathing siphon, the lack of which is the main differential generic character from other Ampullariids. If *Surinamia* is found to possess such a siphon, its taxonomic position would then not be in *Asolene* but in *Pomacea*, and probably near to the subgenus *Limnopomus*. A recent paper by Pilsbry (Proc. Acad. Nat. Sci. Phila., 1933, 85, p. 74-75), summarizes our knowledge of *Asolene* and lists all of the known forms. This is the first record of any member of this genus north of the Rio de la Plata drainage.

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#### THE PEDAL PROTRACTOR MUSCLE SCAR IN SHELLS OF NAIADES

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One object of these notes is to call attention to the fact that the relation of the position of the protractor scar to the position of the anterior adductor scar is of more importance than is generally known.

Lea, in his description of "*Unio*" *quadrans*, stated that it came from Texas, is nearly allied to *berlandierii*, and has the anterior cicatrices confluent. Simpson (1900) expressed doubt that the shell came from Texas and thought that it was a South American shell allied perhaps to *Diplodon apprimus*, *D. uruguayensis*, and possibly to Hupé's "*Unio*" *orbigny*. He classified it as a *Diplodon*, making it the only member of the group of *D. quadrans*. In dealing with this species (1914) he made the following statement: "This shell, which is in the Wheatley collection [now No.